

REMARKS

Applicants have carefully reviewed the Office Action dated April 26, 2002, and respectfully request reconsideration in view of the foregoing amendments and the following remarks.

Claims 3, 5, 6, 10, 12 and 13 have been cancelled and Claims 1, 8 and 9 have been amended. Support for the various layers is found at page 3, line 26 through page 4, line 6. Support for the particle size of zinc oxide is found in cancelled Claim 3 and support for the organosilane binder is found at page 4, lines 3-8.

Claim 8 has been rejected under 35 USC 112, second paragraph, as being indefinite because of the phrase "selected from the group comprising."

Applicants traverse this rejection in view of the amendment to Claim 8 to replace the rejected phrase with the phrase "comprising a member selected from the group consisting of." Accordingly, withdrawal of this rejection is requested.

Claims 1, 2, 4, 7-9, 11 and 14 have been rejected under 35 USC 102(e) as being anticipated by U.S. Patent 6,319,594 to Suzuki et al.

Applicants traverse this rejection in view of the amendments to Claim 1. Applicants submit that the claims are patentable over Suzuki et al because the claims have been limited to a plastic substrate coated with an optional coupling layer, a zinc oxide coating and an abrasion resistant outer coating. To the contrary Suzuki et al requires a transparent conductive layer, a hardcoat layer and a low refractive layer. When additional optional coating layers are applied to more closely approximate the coatings of the subject claims, Suzuki et al has more coating layers than are allowed by the subject claims.

Finally, Applicants submit that Claim 1, as amended, is not anticipated by Suzuki et al because the reference only disclose using the silane coupling agents in combination with ionizing radiation curing resins beginning at column 3, line 59. Because Claim 1 requires the zinc oxide coating to "consist essentially of" the organosilane as the binder, this claim excludes the ionizing radiation curing resins required by Suzuki et al.

For the preceding reasons, it is submitted that Suzuki et al fails to anticipate the subject claims. Accordingly, withdrawal of this rejection is requested.

Claims 1, 5, 8 and 12 have been rejected under 35 USC 102(b) as being anticipated by U.S. Patent 5,925,453 to Kase et al.

Applicants traverse this rejection for the same reasons as previously set forth for overcoming Suzuki et al, i.e., Kase et al contains more coating layers than are allowed by the subject claims. It is not possible to modify Kase et al to provide the coating layers required by the subject claims without having an additional layer present. For example, if a protective layer is provided as disclosed at column 3, lines 46-52, the resulting coating layers still must contain a light reflecting layer, which is excluded by the subject claims. If the protective coating is eliminated, then the remaining coating layers do not satisfy the requirements of the subject claims.

For the preceding reasons, it is submitted that Kase et al fails to anticipate the subject claims. Accordingly, withdrawal of this rejection is requested.

Claims 6-13 have been rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 5,925,453 to Kase et al in view of U.S. Patent 5,747,152 to Oka et al.

Applicants traverse this rejection. Oka et al has been relied upon by the Examiner for a teaching of the use of a silane coupling agent as a surface modifier for the zinc oxide particles. Applicants submit that even if the surface modifier of Oka et al is used for modifying the particles of Kase et al, the resulting coating layers will be outside the scope of the subject claims for the reasons previously set forth regarding the anticipation rejection over Kase et al. Accordingly, withdrawal of this rejection is requested.

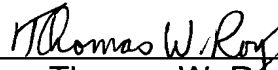
Claims 6-13 have been rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 5,925,453 to Kase et al in view of U.S. Patent 6,106,605 to Basil et al.

Applicants traverse this rejection. Basil et al has been relied upon by the Examiner for a teaching of the use of a protective layer containing sol-gel materials. Applicants submit that even if the sol-gel materials of Basil et al are used for the

protective layer of Kase et al, the resulting coating layers will be outside the scope of the subject claims for the reasons previously set forth regarding the anticipation rejection over Kase et al. Accordingly, withdrawal of this rejection is requested.

The foregoing is believed to be a complete response to the Office Action dated April 26, 2002, and in view of the preceding amendments and remarks, a Notice of Allowance is respectfully requested.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES

IN THE CLAIMS:

Cancel Claims 3, 5, 6, 10, 12 and 13.

1. (Amended) A plastic article, which is transparent and consists of

- i) a plastic substrate,
- ii) optionally a coupling layer,
- iii) at least one zinc oxide coating that does not show scattering and absorption of visible light, wherein the coating consists essentially of zinc oxide nanoparticles which have a primary particle size of 1 to 30 nm and which are embedded in an organosilane as the binder resin and
- iv) one abrasion resistant outer coating

[with a coating containing at least one zinc oxide-containing layer and at least one abrasion-resistant outer layer].

8. (Amended) [An] The plastic article of claim 1 wherein the plastic substrate
i) comprises a [containing transparent plastics] member selected from the group
[comprising] consisting of polyamide, polyethylene, polypropylene, polymethyl methacrylate, polystyrene, polyvinyl cyclohexane and copolymers thereof, acrylonitrile/butadiene/styrene copolymers (ABS), polyvinyl chloride, polycarbonate and blends thereof [and a coating containing at least one zinc oxide-containing layer and at least one abrasion-resistant outer layer].

9. (Amended) The plastic article of claim 8, wherein the abrasion-resistant coating contains sol-gel materials.